

Observations of Comets d, 1885 (Fabry), and e, 1885 (Barnard) made at the Royal Observatory, Greenwich.

(Communicated by the Astronomer Royal.)

The observations were made with the East or Sheepshanks Equatorial, aperture 6·7 inches, by taking transits over two cross-wires at right angles to each other, and each inclined 45° to the parallel of Declination.

Comet d, 1885.

Greenwich Mean Solar Time. 1885.			Observer.	♂-★ R.A.	Corr. for Par. & Refract. in R.A.	♂-★ N.P.D.	Corr. for Par. & Refract. in N.P.D.	No. of Comp.	Apparent R.A.			Apparent N.P.D.	Comp. Star
d	h	m s							h	m	s		
Dec. 24	7 49	24	H.	+0 25·84	+0·14	— 1 35·4	— 3·1	4	23 54	19·26		69 18 56·2	a
27	9 27	14	A.D.	— 0 4·78	+0·22	— 10 42·6	— 3·9	3	23 50	3·68		69 17 21·6	b
	9 36	34		— 0 4·94	+0·22	— 0 15·1	— 3·5	3	23 50	10·59		69 16 49·0	c
	9 47	43		— 1 3·94	+0·23	— 12 44·7	— 4·2	3	23 50	0·64		69 17 6·7	d

Comet e, 1885.

Dec. 15	11 41	17	H.T.	+0 47·70	+0·08	— 3 28·5	— 3·7	5	3 52	29·49		84 5 37·0	e
	11 44	19		+0 3·46	+0·08	— 5 26·5	— 3·8	4	3 52	32·44		84 5 46·8	f
27	10 29	50	A.D.	+0 54·39	+0·09	— 11 23·8	— 4·0	5	3 22	26·36		82 27 33·7	g

Mean Places of Comparison Stars.

	Star's Name.	R.A. 1885 ^o .			N.P.D. 1885 ^o .	Authority.
		h	m	s		
<i>a</i>	W.B. (2) XXIII. 1096	23	53	50.46	69° 20' 57".2	Weisse's Bessel
<i>b</i>	Lalande 46906	23	50	5 58	69 28 29.6	Lalande
<i>c</i>	Arg. Z. + 20° No. 5397	23	50	12.64	69 17 29.6	Bonn. Obs. vol. vi.
<i>d</i>	Arg. Z. + 20° No. 5401	23	51	1.69	69 30 16.8	„ „ „ iv.
<i>e</i>	Arg. Z. + 5° No. 566	3	51	37.67	84 9 8.6	„ „ „ iii.
<i>f</i>	Arg. Z. + 5° No. 572	3	52	24.86	84 11 16.3	„ „ „ iii.
<i>g</i>	W.B. III. 344	3	21	27.95	82 39 3.0	Schjellerup.

Notes.

- Dec. 24 (*d*) Comet very faint; no nucleus.
 27 (*d*) Comet faint; circular, with very faint nucleus.
 15 (*e*) Small round object; no nucleus or tail.
 27 (*e*) Faint, with nucleus.

The observations are corrected for parallax and refraction. The initials H.T., A.D., and H. are those of Mr. Turner, Mr. Downing, and Mr. Hollis respectively.

Royal Observatory, Greenwich:
 1886, January 8.

Spectroscopic Results for the Motions of Stars in the Line of Sight, obtained at the Royal Observatory, Greenwich, in the year 1885.
 No. IX.

(Communicated by the Astronomer Royal.)

The results here given are in continuation of those printed in the *Monthly Notices*, vol. xxxvi. p. 318, vol. xxxvii. p. 22, vol. xxxviii. p. 493, vol. xli. p. 109, vol. xlii. p. 230, vol. xliii. p. 81, vol. xlv. p. 89, and vol. xlv. p. 330. The observations were made with the "half-prism" spectroscope, one "half-prism" with a dispersion of about 18½° from A to H being used, except in a few cases of bright stars mentioned in the Remarks, where a train of two "half-prisms," with a dispersion of 80° from A to H, was used. An eyepiece with a magnifying power of 14 was employed throughout.

The cylindrical lens has always been used in front of the slit as in the observations made previously to 1881. A slip of metal coated with Balmain's luminous paint, inserted immediately behind the measuring pointer, has been frequently employed to give a phosphorescent illumination of the field.

The observations of the Moon and of the Sun have been made as a check on the general accuracy of the results.